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REMARKS

Entry of this amendment, reconsideration of the rejection and allowance of the captioned patent application are respectfully requested. The referenced patent application relates to piperazine urea derivatives, compositions and methods of treatment, primarily for the treatment of obesity, type 2 diabetes and related conditions.

Claims previously in the application were claims 1, 5-25, 29-32 and 37-39. Claims 2-4, 26-28 33-36 and 40-46 were previously cancelled. Claims 11, 30 and 31 are cancelled herein. Claim 1 is amended. Upon entry of this amendment, Claims 1, 5-10, 12-25, 29, 32 and 37-39 will be pending in the case.

Entry of this amendment is appropriate and is respectfully requested. No changes in the language of claim 1 have been made that would require additional consideration or search on the part of the Examiner. Three claims have been cancelled and none have been added. Claim 1 has been amended to incorporate the language of original claim 11, addressing the values of Y. This amendment reduces issues for the Examiner, and simplifies the issues for possible appeal. Hence, it is urged that entry of this amendment is appropriate, even if the Examiner does not believe that it places the application in condition for allowance.

While Applicants have cancelled certain claims herein, Applicants reserve the right to prosecute this additional subject matter by filing division or continuation applications as appropriate.

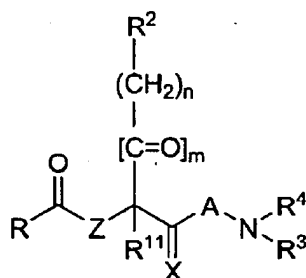
The Examiner has withdrawn the rejections for unpatentability under 35 U.S.C. § 112, and under 102 and 103 over Gante et al. The Examiner has maintained the rejection for obviousness under 35 U.S.C. § 103(a) in view of Rudolf and Morriello taken separately. Applicants appreciatively acknowledge the Examiner's position regarding the 112 rejections and the rejections over Gante, and traverse the rejections over Rudolf and Morriello as set forth below.

Rudolf relates to compounds of the general formula:

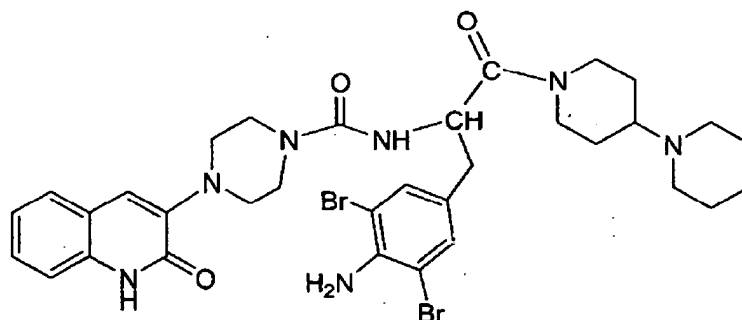
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Compound 269 of Rudolf, which was specifically alleged to apply to Applicants' claim 1, has the following structure:



This compound is outside the scope of the claims at issue, and does not lead in the direction of the invention, since it contains a benzyl group that is trisubstituted with two Br atoms and an amino group. An amino group at this position would be expected by those of ordinary skill to alter the utility of the compound substantially. The Applicants' compounds include an R^1 group that is selected from 4-chlorobenzyl, 4-fluorobenzyl, 3,4-difluorobenzyl, 3,5-difluorobenzyl, 2-cyano-4-fluorobenzyl and 4-methoxybenzyl. None of the presently claimed compounds is trisubstituted, none are bromo substituted on the benzyl moiety, and none are amino-substituted on the benzylic phenyl ring.

Second, the Applicants' piperidinyl group in the amended claims is disubstituted at position 4, in contrast to Rudolf's compounds. Rudolf compound 269 is mono-substituted at this position with a piperidinyl group. These differences render the claimed compounds non-obvious in view of Rudolf.

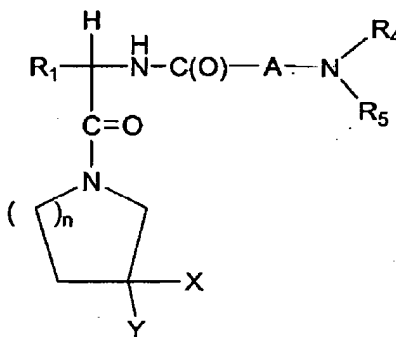
Applicants respectfully disagree with the Examiner's position regarding present claim 28 and its distinction over Rudolf. Applicants' claims 28 was cancelled in the Amendment

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submitted on October 12, 2007, but the point is applicable to many of the claims under consideration. The disubstitution of position 4 of the piperidiny group, taken in conjunction with the definition of R^1 , render the presently claimed compounds distinct from Rudolf.

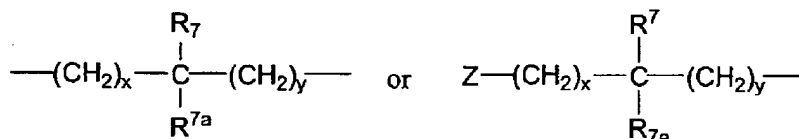
The Examiner's comments regarding Rudolf's permitted benzyl group substitution are respectfully traversed. The substituents in Rudolf that are disclosed do not include the groups cited in Applicants' claim 1. The compound identified by the Examiner has a para-amino group, which would be expected by those of ordinary skill to react differently than the compounds that are presently claimed. Moreover, the portion of Rudolf relied upon addresses compounds in which R^2 represents the list of various aromatics and heteroaromatics that can be substituted, so there is no teaching in Rudolf that would have led in the direction taken by Applicants. Additionally, this does not take into account changes in the backbone of the molecule, or the disubstitution on the piperidiny ring. Based upon the foregoing, it is respectfully urged that the claimed compounds are patentable in view of Rudolf.

Applicants further respectfully traverse the rejection for obviousness in view of Morriello. Morriello does not teach, suggest or in any other way render the claimed invention obvious to those of ordinary skill. Morriello relates to compounds of the formula:



Morriello's compounds contain -A-, precluding the presence of the tertiary or "unsymmetrical" urea that is found in the compounds of Applicants' formula I. See e.g., Column 13, line 45, where -A- represents:

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and x and y are 0-3, Z is N or O. The -A- in Morriello cannot represent a bond. The presence of the -A- group in Morriello significantly alters the backbone of the molecule, leading away from the present invention, and nothing within Morriello teaches or suggests deleting the -A- group from the genus disclosed therein, to lead in the direction of the presently claimed invention.

There are additional distinctions between Morriello and the presently claimed compounds. Besides the presence of the -A- linking moiety, the R¹ group recited in Morriello at Columns 7 and 8 does not include an appropriately substituted benzyl group. Most of Morriello's compounds contain an indolyl-methyl group at this position, or a phenyl ring on the end of a three carbon alkyl chain. Thus, Morriello does not lead in the direction of the appropriately substituted benzyl group, as in the presently claimed compounds.

Moreover, throughout the reference, Morriello does not allow for para substitution (across from the nitrogen) on the piperidyl group; it is always meta to the nitrogen atom, or one carbon away from the nitrogen atom, whether the ring is a pyrrolidine, a piperidine or an azepine ring. This is most clearly shown in Morriello at Column 6, line 5, and in the examples at Column 11, line 30 - Column 24, line 25.

Additionally, Applicants' compounds include a ring that contains two nitrogen atoms, such as a piperazinyl ring or a higher heterocyclic ring (when m=2). Morriello's compounds do not include the same piperazine or diazepine ring structure.

Lastly, the utilities in Morriello revolve around growth hormone deficiencies, which can result in various disorders, such as dwarfism. The Morriello compounds are alleged to be useful for stimulating growth hormone production or secretion. This is in complete contrast to the compounds that are the subject of claim 1. This constitutes a teaching away from the present invention.

Applicants respectfully disagree that Morriello directly addresses obesity since the primary indications are related to growth hormone deficiency, a mechanism of action that is

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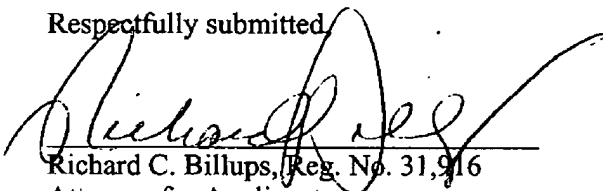
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Applicants respectfully disagree that Morriello directly addresses obesity since the primary indications are related to growth hormone deficiency, a mechanism of action that is largely unrelated to the present application and MC4R agonists. It is urged that the distinct differences in structure and the teachings away by providing different utilities render the presently claimed invention patentable over Morriello.

Based upon the foregoing, it is respectfully urged that the application is in allowable condition. Such action is respectfully requested. If the Examiner has any questions regarding the application, he is respectfully requested to telephone the undersigned.

Respectfully submitted,

By


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